

**WHAT IS CLAIMED:**

1. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps of:

- 5           determining block boundaries;  
             determining an approximate metric of artifact visibility;  
             adaptively filtering luminance;  
             adaptively adjusting local saturation variation;  
             adaptively simulating high spatial frequency image detail;

10   wherein the adaptive steps are executed to a degree or an amount dependent on the metric of artifact severity.

2. The method of claim 1 wherein prior to adaptively filtering luminance, luminance values are interpolated across block boundaries

15   3. The method of claim 1 wherein in conjunction with adaptively filtering luminance, chrominance is adaptively filtered.

20   4. The method of claim 2 wherein in conjunction with adaptively filtering luminance, chrominance is adaptively filtered.

5. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps of:

- 25           determining block boundaries;  
             determining an approximate metric of artifact visibility;  
             adaptively filtering luminance with a filter;  
             adaptively increasing local chrominance contrast;  
             adaptively simulating high frequency image detail by means of sharpening and addition of noise;

30   wherein the adaptive steps are executed to degree that depends on the metric of artifact visibility.

09697765-070201

6. The method of claim 5 wherein prior to adaptively filtering luminance, luminance values are interpolated across block boundaries.

5 7. The method of claim 5 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

8. The method of claim 6 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

10

9. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps of:

determining block boundaries;

adaptively filtering luminance; and

15

adaptively adjusting local saturation variation.

10. A method of reducing artifacts in an image previously processed by block transform encoding comprising the steps sharpening of existing detail and simulating missing detail by the addition of noise.

20

11. The method of claim 10 including a step of adaptively filtering luminance.

12. The method of claim 11 wherein prior to adaptively filtering luminance, luminance values are interpolated across block boundaries.

25

13. The method of claim 10 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

14. The method of claim 12 wherein after adaptively filtering luminance, chrominance is adaptively filtered.

30

0969765-070201

15. A method of reducing artifacts in an image previously processed by block transform encoding comprising the step of selecting a median filter window based on an assessment of a pixel value according to a variance of a binary mask.

5 16. The method of claim 1 wherein the pixel value comprises luminance texture.

17. A method of reducing artifacts in an image comprising the step of selecting a median filter window based on an assessment of a pixel value according to a variance of a binary mask.

10

18. A computer having software and hardware therein that is capable of executing and performing the method of claim 1.

15 19. A computer having software and hardware therein that is capable of executing and performing the method of claim 2.

20. A computer having software and hardware therein that is capable of executing and performing the method of claim 5.

20 21. A computer having software and hardware therein that is capable of executing and performing the method of claim 8.

22. A computer having software and hardware therein that is capable of executing and performing the method of claim 10.

25

23. A computer having software and hardware therein that is capable of executing and performing the method of claim 15.

30

09897765-070201